

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A cast iron alloy for a cast iron product characterized by high thermal stability, the alloy consisting essentially of, as nonferrous constituents, positive additions of C, Si, Mo, Al, Ni, Zr, wherein C is present in an amount of 2.5 to 2.8% by weight, the Si content is 4.7 to 5.2% by weight, the Mo content is 0.5 to 0.9% by weight, the Al content is 0.5 to 0.9% by weight, the Ni content is 0.1 to 1.0% by weight, and wherein the Zr content is 0.1 to 0.4% by weight, wherein graphite in the as cast iron alloy comprises spheroidal graphite.

Claim 2-9 (canceled).

Claim 10 (previously presented): The cast iron alloy as claimed in claim 1, including Mg and S each up to .05 wt.% max, and balance essentially Fe.

Claim 11 (original): The cast iron alloy as claimed in claim 1, wherein the cast iron product comes into contact with exhaust gas from an internal combustion engine.

Claim 12 (original): The cast iron alloy as claimed in claim 1, wherein the cast iron product is an exhaust manifold for receiving exhaust gases from an internal combustion engine.

Claim 13 (original): A process for producing the cast iron alloy as claimed in claim 7, wherein the Al and Zr are added as an Al-Zr prealloy immediately before the alloy melt is cast.

Claim 14 (original): A process for producing the cast iron alloy as set forth in claim 13, wherein the temperature of the alloy melt is over 1460°C immediately prior to casting.

Claim 15 (currently amended): In combination, an internal combustion engine and a cast iron product, the cast into product being contacted with exhaust gases from the internal combustion engine, the cast iron product comprises a cast iron alloy consisting essentially of, as nonferrous constituents, positive additions of C, Si, Mo, Al, Ni, Zr, wherein C is present in an amount of 2.5 to 2.8% by weight, the Si content is 4.7 to 5.2% by weight, the Mo content is 0.5 to 0.9% by weight, the Al content is 0.5 to 0.9% by weight, the Ni content is 0.1 to 1.0% by weight, and wherein the Zr content is 0.1 to 0.4% by weight, wherein graphite in the as cast iron alloy comprises spheroidal graphite.

Claim 16 (new): A cast iron alloy according to claim 1, wherein S is less than .01.

Claim 17 (new): A cast iron alloy according to claim 1, wherein S is less than .15.